WHAT IS CLAIMED IS:

1. A polarization apparatus of a coaxial flexible piezoelectric cable, comprising:

a first conductor drum having a plurality of grooves for coming in contact with a roughly half peripheral surface of a piezoelectric body tube including a coaxial flexible piezoelectric body formed surrounding a core electrode and being rotated in a given direction,

a second conductor drum being placed behind said first conductor drum and having a plurality of grooves for coming in contact with another roughly half peripheral surface of said piezoelectric body tube,

winding means being placed behind said second conductor drum for winding said piezoelectric body tube,

conduction means for electrically connecting said first conductor drum and said second conductor drum, and

voltage generation means being connected to said conduction means and said core electrode.

2. The polarization apparatus of a coaxial flexible piezoelectric cable as claimed in claim 1, wherein

said first conductor drum and said second conductor drum are rotated by said piezoelectric body tube wound by said winding means.

3. The polarization apparatus of a coaxial flexible piezoelectric cable as claimed in claim 1, further comprising:

tension application means for applying a tension to said piezoelectric body tube before said piezoelectric body tube is disposed on said first conductor drum.

4. The polarization apparatus of a coaxial flexible piezoelectric cable as claimed in claim 1, further comprising:

discharging means for removing surface charges of said piezoelectric body tube after said piezoelectric body tube leaves said second conductor drum.

5. The polarization apparatus of a coaxial flexible piezoelectric cable as claimed in claim 1, further comprising:

capacitance detection means for detecting capacitance between said core electrode of said piezoelectric body tube and said conduction means.

6. The polarization apparatus of a coaxial flexible piezoelectric cable as claimed in claim 1, further comprising:

an electrical insulating partition wall surrounding said first conductor drum and said second conductor drum.

7. The polarization apparatus of a coaxial flexible piezoelectric cable as claimed in claim 6, wherein

said electrical insulating partition wall is transparent.

8. The polarization apparatus of a coaxial flexible piezoelectric cable as claimed in claim 6, further comprising:

warm air generation means for blowing a warm current of air into said electrical insulating partition wall.

9. The polarization apparatus of a coaxial flexible piezoelectric cable as claimed in claim 1, wherein

said first conductor drum and said second conductor drum are formed of stainless steel.

10. A polarization method of a coaxial flexible piezoelectric cable, comprising the steps of:

disposing the piezoelectric body tube in one groove of a first conductor drum,

disposing said piezoelectric body tube in a groove of a second conductor drum,

repeating to dispose said piezoelectric body tube in another groove of said first conductor drum in such a manner that said piezoelectric body tube of a predetermined length is disposed, and

applying a DC voltage between said core wire of said piezoelectric body tube and said conduction means, when said piezoelectric body tube is wound by winding means.

11. The polarization method of a coaxial flexible piezoelectric cable as claimed in claim 10, wherein

said core wire of said piezoelectric body tube is placed at ground potential and a DC voltage is applied between said core wire and said conduction means.

12. The polarization method of a coaxial flexible piezoelectric cable as claimed in claim 11, wherein

said coaxial flexible piezoelectric body comprises a rubber-based resin and ceramic piezoelectric body powder.

13. A polarization apparatus of a coaxial flexible piezoelectric cable, comprising:

a block-like conductor having a passage of a piezoelectric body tube including a coaxial flexible piezoelectric body formed surrounding a core electrode,

move means being placed behind said block-like conductor for moving the piezoelectric body tube, and

DC voltage generation means being connected to said block-like conductor and said core electrode.

14. The polarization apparatus of a coaxial flexible piezoelectric cable as claimed in claim 13, further comprising:

heating means for heating said block-like conductor.

15. The polarization apparatus of a coaxial flexible piezoelectric cable as claimed in claim 13, wherein

said passage of said piezoelectric body tube, placed in said block-like conductor is on a face of said block-like conductor.

16. The polarization apparatus of a coaxial flexible piezoelectric cable as claimed in claim 13, further comprising:

a resistor in series with said piezoelectric body tube.

17. A polarization method of a coaxial flexible piezoelectric cable, comprising the steps of:

disposing a piezoelectric body tube in a passage made in a block-like conductor, and

applying a DC voltage between core wire of said piezoelectric body tube and said block-like conductor, when said piezoelectric body tube is still or is moved by move means.

18. The polarization method of a coaxial flexible piezoelectric cable as claimed in claim 17, further comprising:

heating means for heating said block-like conductor.

19. The polarization method of a coaxial flexible piezoelectric cable as claimed in claim 17, wherein

said core wire of said piezoelectric body tube is placed at ground potential and a DC voltage is applied between said core wire and said block-like conductor.

20. The polarization apparatus of a coaxial flexible piezoelectric cable as claimed in claim 13, wherein said piezoelectric body tube passage placed in said block-like conductor is a groove.

21. The polarization apparatus of a coaxial flexible piezoelectric cable as claimed in claim 20, wherein

a cover is placed on the groove of said piezoelectric body tube passage placed in said block-like conductor.

22. The polarization apparatus of a coaxial flexible piezoelectric cable as claimed in claim 13, wherein

said piezoelectric body tube passage placed in said block-like conductor is a hole.

23. The polarization apparatus of a coaxial flexible piezoelectric cable as claimed in claim 13, further comprising:

a resistor in series with said piezoelectric body tube.

24. A polarization method of a coaxial flexible piezoelectric cable comprising the steps of:

disposing a piezoelectric body tube in a passage made in a block-like conductor, and

applying a DC voltage between core wire of said piezoelectric body tube and said block-like conductor, when said piezoelectric body tube is still or is moved by move means.

25. The polarization method of a coaxial flexible piezoelectric cable as claimed in claim 24, further comprising:

heating means for heating said block-like conductor.

26. The polarization method of a coaxial flexible piezoelectric cable as claimed in claim 24, wherein

said core wire of said piezoelectric body tube is placed at ground potential, and

a DC voltage is applied between said core wire and said block-like conductor.

27. A polarization apparatus of a coaxial flexible piezoelectric body cable, comprising:

a block-like conductor having a passage section of a piezoelectric body tube including a coaxial flexible piezoelectric body formed surrounding a core electrode, said passage section being made uneven like pits and projections, and

DC voltage generation means being connected to said

block-like conductor and said core electrode.

28. The polarization apparatus of a coaxial flexible piezoelectric body cable as claimed in claim 27, wherein said block-like conductor is provided with a heater.

29. The polarization apparatus of a coaxial flexible piezoelectric body cable as claimed in claim 27, wherein wire netting is disposed on said block-like conductor to provide the passage section of said piezoelectric body tube.

30. The polarization apparatus of a coaxial flexible piezoelectric body cable as claimed in claim 27, wherein said block-like conductor is formed with a groove formed with pits and projections to provide the passage section of said piezoelectric body tube.

31. The polarization apparatus of a coaxial flexible piezoelectric body cable as claimed in claim 27, wherein said block-like conductor is formed with a groove on which wire netting is disposed to provide the passage section of said piezoelectric body tube.

32. A polarization method of a coaxial flexible piezoelectric body cable comprising the steps of:

disposing a piezoelectric body tube in a passage section of a block-like conductor having the passage section of said piezoelectric body tube including a coaxial flexible piezoelectric body formed surrounding a core electrode, the passage section being made uneven like pits and projections, and

applying a DC voltage between said block-like conductor and said core electrode.

33. The polarization method of a coaxial flexible piezoelectric body cable as claimed in claim 32, wherein

said block-like conductor is provided with a heater for heating said block-like conductor.